#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAR 2 6 2013

REPLY TO THE ATTENTION OF:

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

John Cavese, Environmental Manager AK Steel Corporation - Mansfield Operation 913 Bowman Street Mansfield, Ohio 44901-0247

Dear Mr. Cavese:

The United States Environmental Protection Agency ("EPA") is issuing the enclosed Notice and Finding of Violation ("NOV/FOV") to AK Steel Corporation - Mansfield Operation ("AK Steel" or "you") pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(a)(1) and (3). We find that you have violated the Act, the Title V Permit requirements, the Permit to Install requirements of the Ohio State Implementation Plan ("SIP") and the Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 ("NSPS AAa"), 40 C.F.R. § 60.270a <u>et seq.</u>, at your Mansfield, Ohio facility.

Section 113 of the Act, 42 U.S.C. § 7413, gives EPA several enforcement options to resolve these violations, including issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. EPA is offering you an opportunity to confer with us about the violations cited in the NOV/FOV. The conference will give you an opportunity to present information on the specific violations, any efforts you have taken to comply, and the steps you will take to bring the facility into compliance. Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Reza Bagherian. You may call him at (312) 886-0674 to request a conference. You should make the request no later than 10 calendar days after you receive this letter, and we should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely

George T. Czerniak

Director

Air and Radiation Division

### Enclosure

cc: Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency

Mark Budge, APC Manager Northwest District Office Division of Air Pollution Control Ohio Environmental Protection Agency

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)
AK Steel Corporation - Mansfield Operation Mansfield, Ohio	) NOTICE AND FINDING OF ) VIOLATIONS ) EPA-5-13-OH-06
Proceedings Pursuant to Section 113(a)(1) and (3) of the Clean Air Act, 42 U.S.C. §§	) )
7413(a)(1) and (3)	)

#### NOTICE AND FINDING OF VIOLATIONS

The U.S. Environmental Protection Agency ("EPA") is issuing this Notice and Finding of Violations ("NOV/FOV") to AK Steel Corporation - Mansfield Operation ("AK Steel") under Sections 113(a)(1) and (3) of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(a)(1) and (3). The authority to issue this NOV/FOV has been delegated to the Regional Administrator of the U.S. Environmental Protection Agency, Region 5, and redelegated to the Director, Air and Radiation Division. EPA finds that AK Steel has violated the Act, 42 U.S.C. §§ 7401 et seq., the Title V permit requirements, the Permit to Install ("PTI") No. 03-17463 and the Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 ("NSPS AAa") at 40 C.F.R. § 60.270a et seq., at the AK Steel facility located in Mansfield, Ohio (the "facility"), as follows:

#### STATUTORY AND REGULATORY BACKGROUND

#### New Source Performance Standards

- 1. Under Section 111 of the Act, 42 U.S.C. § 7411, the Administrator promulgated the New Source Performance Standards ("NSPS") General Provisions, at 40 C.F.R. Part 60, Subpart A, and the Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 at 40 C.F.R. § 60.270a et seq. Subpart AAa applies to each electric arc furnace ("EAF") constructed, modified or reconstructed after August 17, 1983. 40 C.F.R. § 60.270a.
- 2. 40 C.F.R. § 60.272a(a)(2) provides that no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an EAF any gases which exit from a control device and exhibit 3 percent opacity or greater.

3. 40 C.F.R. § 60.272a(a)(3) provides that no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases from a melt shop and, due solely to operations of any EAF, exhibit 6 percent opacity or greater.

#### Title V Permit

- 4. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), provides that it shall be unlawful for any person to violate any requirement of a Title V permit after the effective date of any Title V permit program approved by EPA.
- 5. The State of Ohio operating permit program was granted full approval by EPA on August 15, 1995, with an effective date of October 1, 1995 (60 Fed. Reg. 42045; 40 C.F.R. Pt. 70, App. A).
- 6. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by EPA under the Act.
- 7. The Ohio Environmental Protection Agency ("Ohio EPA") issued a Title V permit to AK Steel for the facility, ID number 0370010023, on July 31, 2003 ("2003 Permit") and reissued the permit under the same facility ID number, on February 17, 2011 ("2011 Permit").
- 8. Pursuant to AK Steel's 2003 Permit Part III, Terms and Conditions for Emissions Units, #8 EAF (P902) and #9 EAF (P903), Section A.I.2.d.ii (2011 Permit Condition C.8(b)(1)(a)), visible particulate emissions from the baghouse serving the melt shop shall not exhibit 3 percent opacity or greater, as a six-minute average.
- 9. Pursuant to AK Steel's 2003 Permit Part III, Terms and Conditions for Emissions Units, #8 EAF (P902) and #9 EAF (P903), Section A.I.2.d.iiii (2011 Permit Condition C.8(b)(1)(a)), the permittee shall not cause to be discharged into the atmosphere gases from the EAF which exit from the shop and, due solely to the operations of any affected EAF or Argon-Oxygen Decarborization vessel(s), exhibit 6 percent opacity or greater, as a six-minute average.
- 10. Pursuant to AK Steel's 2003 Permit Part III, Terms and Conditions for Emissions Units, #8 EAF (P902) and #9 EAF (P903), Section A.II.1.b (2011 Permit Condition C.8(c)(3)(a)), AK Steel shall maintain the control system's fan motor amperes range, when the EAF is operating in the meltdown and refining periods, at plus or minus fifteen percent of the fan motor amps value established during the most recent emission testing that demonstrated the emissions unit was in compliance.

### Ohio State Implementation Plan and Permit to Install Requirements

- 40 C.F.R. § 52.23 states that "failure to comply with any provision of this part, or with any approved regulatory provision of a State implementation plan, or with any permit condition ... shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act."
- The Ohio State Implementation Plan ("SIP"), at Ohio Administrative Code Rule ("OAC Rule") 3745-31-02, requires owners or operators of an air emissions source to obtain a PTI prior to construction of a new or modified air emission source. It also requires the Director of the Ohio Environmental Protection Agency ("Ohio EPA") to act on such a PTI in accordance with OAC Rule 3745-31-05. It also requires the transferee of any PTI to accept the responsibilities of the original permit holder-transferor. This rule was revised with a Federal effective date of March 10, 2003, 68 Fed. Reg. 2909 (January 22, 2003).
- 13. Pursuant to the OAC Rule 3745-31-05, the director of Ohio EPA shall issue a PTI or plan approval, on the basis of the information appearing in the application, or information gathered by or furnished to the Ohio EPA, or both, if he determines that the installation or modification and operation of the air contaminant source will not prevent or interfere with the attainment or maintenance of applicable ambient air quality standards and not result in a violation of any applicable laws.
- Pursuant to AK Steel's PTI No. 03-17463 Condition C.4(b), for the thin slab continuous caster identified as P062, visible particulate emissions from the baghouse serving P062 shall not exhibit 5 percent opacity or greater, as a six-minute average.

#### FACTUAL BACKGROUND

- 15. AK Steel owns and operates a steel-producing facility located 913 Bowman Street, in Mansfield, Ohio.
- According to AK Steel's approved Title V permit, AK Steel operates, amongst others, the following emissions units at its Mansfield, Ohio facility: two electric arc furnaces (EAFs) identified as EAF #8 (P902) and EAF #9 (P903); a ladle metallurgical furnace (LMF) identified as P904, six natural gas fired ladle preheaters identified as P067-P073, an argon-oxygen decarburization (AOD) vessel identified as P924, and a thin slab continuous caster identified as P062.
- 17. On March 4, 2010, EPA representative inspected the AK Steel facility located in Mansfield, Ohio.
- 18. From 2008 to 2013, AK Steel submitted Title V permit quarterly deviation reports to the

Northwest District Office of Ohio Environmental Protection Agency.

#### **VIOLATIONS**

19. According to the quarterly deviation reports submitted by AK Steel to the Northwest District Office of Ohio EPA, AK Steel reported the following exceedances of the 3% opacity limit from the baghouse serving the melt shop at its facility:

Date	Duration of Exceedances
August 8, 2009	6 minutes of opacity exceedances (1 deviation)
May 2, 2010	21 minutes of opacity exceedances (3 deviations)

- Citations: NSPS AAa, 40 C.F.R. § 60.272a(a)(2), and 2003 Permit Part III, Terms and Conditions for Emissions Unit #8 EAF (P902), Section A.I.2.d.ii.
- 20. According to the quarterly deviation reports submitted by AK Steel to the Northwest District Office of Ohio EPA, AK Steel reported the following exceedances of the 6% opacity limit from the building enclosure at its facility:

Date	Duration of Exceedances
April 28, 2008	24 minutes of opacity exceedances (4 deviations)
May 2, 2008	6 minutes of opacity exceedances (1 deviation)
October 29, 2009	20 minutes of opacity exceedances (3 deviations)

- Citations: NSPS AAa, 40 C.F.R. § 60.272a(a)(3), and 2003 Permit Part III, Terms and Conditions for Emissions Units #8 EAF (P902) and # 9 EAF (P903), Section A.1.2.d.iii.
- 21. According to the quarterly deviation reports submitted by AK Steel to the Northwest District Office of Ohio EPA, AK Steel reported the following exceedances of the 5% opacity limit from the baghouse serving the thin slab continuous caster at its facility:

Date	Duration of Exceedances
July 26, 2010	195 minutes of opacity exceedances from 00:25 – 03:40 (32 deviations)

• Citation: PTI No. 03-17463 Condition C.4(b) for the thin slab continuous caster.

22. According to the quarterly deviation reports submitted by AK Steel to the Northwest District Office of Ohio EPA, the following fan motor amperes deviations occurred at the #8 and #9 Baghouse ID fans serving the Melt Shop Operations:

Date/Time	Description of Fan Motor Amperes Deviations
January 17, 2009	2 Deviations at ID fans #4 and #5 at the #8 Baghouse
January 18, 2009	2 Deviations at ID fans #4 and #5 at the #8 Baghouse
January 18, 2009	3 Deviations at ID fans #1, #2 and #3 at the #9 Baghouse
February 21, 2009	3 Deviations at ID fans #1, #2 and #3 at the #9 Baghouse
February 14, 2009	2 Deviations at ID fans #4 and #5 at the #8 Baghouse
November 19, 2009	1 Deviation at ID fan #5 at #8 Baghouse
November 29, 2009	1 Deviation at ID fan #5 at #8 Baghouse
December 11, 2009	3 Deviations at ID fans #1, #2 and #3 at the #9 Baghouse
August 7, 2010	3 Deviations at ID fans #1, #2 and #3 at the #9 Baghouse
January 5, 2010	2 Deviations at ID fans #4 and #5 at the #8 Baghouse

• Citation: 2003 Permit Part III, Terms and Conditions for Emissions Units #8 EAF (P902) and #9 EAF (P903), Section A.II.1.b.

#### **ENVIRONMENTAL IMPACT OF VIOLATIONS**

- 23. Violation of opacity standards is indicative of mass emission standards violations. Such violations increase public exposure to, amongst other pollutants, unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.
- 24. Particulate matter, especially fine particulates, contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:

- irritation of the airways, coughing and difficulty breathing;
- decreased lung function;
- aggravated asthma;
- chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

3/26/13

Date

George T. Czerniak

Director

Air and Radiation Division

#### **CERTIFICATE OF MAILING**

I, Loretta Shaffer, certify that I sent a Finding of Violation by Certified Mail, Return Receipt Requested, to:

John Cavese, Environmental Manager AK Steel Corporation - Mansfield Operation 913 Bowman Street Mansfield, Ohio 44901-0247

I also certify that I sent copies of the Finding of Violation by first class mail to:

Robert Hodanbosi, Chief Division of Air Pollution Control Ohio Environmental Agency Lazarus Government Center P.O. Box 1049 Columbus, Ohio 43216-1049

and

Mark Budge, APC Manager
Division of Air Pollution Control
Ohio Environmental Protection Agency, Northwest District Office
347 North Dunbridge Road
Bowling Green, Ohio 43402

on the <u>26</u> day of <u>Mar</u>, 2013.

Loretta Shaffer, Secretary AECAS, (MN/OH)

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CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7674 1347